

## WHAT IS CLAIMED:

1. A stent delivery assembly, comprising:  
a generally tubular catheter having an inner member and an outer member;  
a stent disposed between the outer member and the inner member; and  
5 a cutting mechanism secured to the catheter, the cutting mechanism positioned in contact with the catheter outer member.
2. The assembly of claim 1, wherein the cutting mechanism comprises a blade.
3. The assembly of claim 1, wherein the cutting mechanism is slidably disposed on the catheter outer member.
4. The assembly of claim 3, further comprising:  
a catheter handle slidably disposed on the catheter.
5. The assembly of claim 4, further comprising:  
a slider mechanism slidably secured to the outer member, the slider mechanism comprising a securing mechanism configured to releasably secure the slider mechanism to the catheter outer member,  
5 wherein the cutting mechanism is secured to the slider mechanism.
6. The assembly of claim 5, wherein the slider mechanism is slidably positioned within the catheter handle, whereby the slider mechanism may be slid with respect to the catheter handle.

7. The assembly of claim 6, wherein the slider mechanism comprises a catheter handle engaging device that releasably engages the catheter handle to prevent sliding of the slider mechanism with respect to the catheter handle.

8. The assembly of claim 6, wherein the catheter handle comprises an outer member locking mechanism for fixedly securing the handle to the catheter outer member.

9. The assembly of claim 6, wherein the catheter handle comprises an inner member locking mechanism for fixedly securing the handle to the catheter inner member.

10. A method for adjusting the length of a stent delivery catheter, comprising:  
providing a stent delivery catheter having an inner member and an outer member;  
cutting the catheter outer member along a first cutting line extending  
5 generally longitudinally along the length of the catheter outer member, whereby the catheter outer member is split along the first cutting line; and  
peeling the catheter outer member away from the catheter inner member, whereby the catheter outer member is peeled along the first cutting line.

11. The method of claim 10, wherein the catheter inner member has a distal end and a proximal end, the method further comprising:  
cutting off a selected portion of the catheter inner member, wherein the selected portion is adjacent to the catheter inner member proximal end.

12. The method of claim 10, further comprising:  
cutting the catheter outer member along a second cutting line extending generally longitudinally along the length of the catheter outer member, whereby the catheter outer member is split along the second cutting line.

13. The method of claim 12, whereby the second cutting line extends generally parallel to the first cutting line.

14. The method of claim 10, wherein the stent delivery catheter comprises a first cutting device in engagement with the catheter outer member, wherein cutting the catheter outer member along the first cutting line comprises:

5       sliding the first cutting device along the catheter with the first cutting device engaging the catheter outer member along the first cutting line, whereby the catheter outer member is split along the first cutting line.

15. The method of claim 14, wherein the stent delivery catheter comprises a second cutting device in engagement with the catheter outer member, the method further comprising:

5       sliding the second cutting device along the catheter outer member along a second cutting line extending generally longitudinally along the length of the catheter outer member, whereby the catheter outer member is split along the second cutting line.

16. The method of claim 10, wherein the stent delivery catheter comprises a first cutting device and a second cutting device, with the first cutting device and the second cutting device both secured to a slider mechanism slidably disposed on the catheter outer member, the method comprising:

5       sliding the slider mechanism along the catheter outer member with the first cutting device engaging the outer member along a first cutting line and with the second cutting device engaging the outer member along a second cutting line, whereby the catheter outer member is split into two halves defined by the first cutting line and the second cutting line.

17. A catheter comprising:

an elongated catheter member having a distal end and a proximal end;

a catheter handle secured to the elongated catheter member; and  
a platform removably secured to the catheter handle.

18. The catheter of claim 17, wherein the removable platform comprises protruding stabilizers.

19. The catheter of claim 17, wherein the removable platform has a lower surface that is generally curved.

20. The catheter of claim 17 wherein the removable platform is slidably secured to the catheter handle.

21. A catheter assembly comprising:  
a generally tubular catheter having an outer member; and  
a cutting mechanism slidably secured to the catheter outer member.

22. The catheter assembly of claim 21, further comprising:  
a catheter handle slidably secured to the catheter outer member, wherein the cutting mechanism is slidably secured to the catheter handle.

23. The catheter assembly of claim 22, wherein the cutting mechanism is positioned within the catheter handle.

24. The catheter assembly of claim 21, wherein the cutting mechanism comprises a blade engaging the catheter outer member.